

**WHAT IS CLAIMED:**

Claims 1-15 (Cancelled)

16. (Amended) A database system which searches a plurality of tables joined by a relational database, comprising:

table extraction means for extracting one table including columns that store data to be retrieved from a plurality of tables;

column exclusion means for excluding columns of the table extracted by said table extraction means and columns on other tables which store the same data contents as data contents of the columns on the extracted table from columns to be extracted in subsequent processing; and

table joining means for joining the tables extracted in turn by said table extraction means when the processing of said table extraction means and the processing of said column exclusion means have been repeated until all the columns including data to be retrieved are analyzed.

17. (Original) A system according to claim 16, wherein said table extraction means extracts one table including a largest number of columns which store data to be retrieved from the plurality of tables.

18. (Original) A system according to claim 16, further comprising metadata management means for collecting and managing metadata which pertain to joining of the plurality of tables, and wherein said table extraction means extracts the table on the basis of the metadata stored in said metadata management means.

19. (Original) A system according to claim 16, further comprising retrieval means for retrieving objects in accordance with a retrieval key, and wherein data is retrieved from the tables which are extracted in turn and joined by said table extraction means.

20. (~~Original~~Amended) A method of data retrieval from a database, comprising ~~the step of~~ repeating processing for extracting a table and processing for excluding columns including identical data upon search by joining a plurality of tables by a relational database in such a manner that one table including columns that store data to be retrieved is extracted from the plurality of tables, columns which store the same data contents as data contents of columns on the extracted table of other tables are excluded, and another table is extracted from the remaining tables, and joining one or more tables extracted in turn.

21. (Original) A method according to claim 20, wherein upon extracting one table from the plurality of tables, one table including a largest number of columns that store data to be retrieved is extracted.

22. (Original) A method according to claim 20, wherein data is retrieved from the one or more joined tables.

23. (~~Original~~Amended) A computer-readable recording medium recording a program for making a computer implement the functions of:

~~means for~~ extracting one table including a largest number of columns that store data to be retrieved from a plurality of tables upon search by joining a plurality of tables by a relational database;

~~means for~~ excluding columns of the extracted table and columns on other tables

which store the same data contents as data contents of the columns on the extracted table from columns to be extracted in subsequent processing; and

~~means for~~ joining the tables extracted in turn when the processing of said two means have been repeated until all the columns including data to be retrieved are analyzed.

24. ~~(Original)~~(Amended) A medium according to claim 23, wherein said program makes the computer further implement ~~retrieval means for~~ the function of retrieving objects in accordance with a retrieval key from the tables extracted and joined by said table extraction means.